University of Tennessee, Knoxville
Trace: Tennessee Research and Creative Exchange

Forestry, Trees, and Timber | UT Extension Publications

7-1-1998

SP513 Small Flowering Trees for Tennessee Landscapes

The University of Tennessee Agricultural Extension Service

Follow this and additional works at: http://trace.tennessee.edu/utk_agexfores

Part of the Plant Sciences Commons

Recommended Citation
"SP513 Small Flowering Trees for Tennessee Landscapes," The University of Tennessee Agricultural Extension Service, SP 513-15M-7/98 R12-496-11-001-99, http://trace.tennessee.edu/utk_agexfores/48

The publications in this collection represent the historical publishing record of the UT Agricultural Experiment Station and do not necessarily reflect current scientific knowledge or recommendations. Current information about UT Ag Research can be found at the UT Ag Research website.
This Trees for Tennessee Landscapes - Choosing the Right Tree is brought to you for free and open access by the UT Extension Publications at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Forestry, Trees, and Timber by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

Agricultural Extension Service
The University of Tennessee

SP 513

Small Flowering Trees for Tennessee Landscapes

Donna C. Fare
Assistant Professor
Ornamental Horticulture
& Landscape Design

Wayne K. Clatterbuck
Assistant Professor
Forestry, Wildlife
& Fisheries

Small flowering trees are second only to shade trees for importance in the landscape. Flowering trees are valuable plants with colorful, showy blossoms and other unusual features that give interest and variety in the landscape. All trees flower, but large trees are valued for providing shade, even though flowers may be noticeable. Large trees establish the basic framework of the landscape and should be planted in key locations for optimal shading. Most properties need both small and large trees, which creates a more desirable landscape.

Carefully select your small flowering trees to ensure they fit into the landscape. In addition to their blooms, they can screen objectionable views, provide more privacy by adding height to a fence or give interest as specimen plants. Most small residential landscapes need only a few flowering trees. They should not be scattered indiscriminately over an area, but grouped according to height and canopy forms. Avoid combining trees with extremes in canopy forms and texture. Trees are more distinctive when there is a thread of continuity between them.

Donna Fare

Spring flowering of the native White Fringetree, *Chionanthus virginicus*.

National Arboretum

Lagerstroemia x *fauriei* 'Seminole', a Crapemyrtle introduced by the National Arboretum.

A Sampler of Small Flowering Trees

Botanical Name	Common Name	Season of Flower	Flower Color	Comments
Acer rubrum	Red Maple	Late winter	Red	Commonly called red maple due to the reddish flowers in late winter and the red fall color. One of the most popular landscape trees in the Southeast.
Amelanchier species and hybrids	Serviceberry	Spring	White	Native. Full sun to light shade. Flowers in spring prior to leafing out. Edible fruit ripens in June and is loved by birds. Bark is smooth gray and attractive in winter. *Amelanchier x grandiflora* 'Autumn Brilliance', 'Princess Diana' and 'Cole's Select' are good selections with an abundance of flowers and excellent fall color.
Cercis canadensis	Eastern Redbud	Early spring	Pink, lavender	Native. Handsome small vase-shaped tree. Many cultivars exist with variations in flower color. 'Appalachian Red' is the most red flowering cultivar available. 'Forest Pansy' is a good small tree for purple-red summer leaf color.
Cercis reniformis	Texas Redbud	Early spring	White, pink	Native to Texas. Known for the outstanding glossy foliage in summer. 'Oklahoma' has the deepest pink flower color, and 'Texas White' has pure white flowers.
Chionanthus retusus	Chinese Fringe Tree	Late spring	White	Adaptable small tree with excellent leathery dark green foliage. Trees need space for the canopy to develop into a broad vase shape.
Chionanthus virginicus	White Fringetree	Spring	White	Native. Grown mostly for the showy flower display in spring. Adapts to most sites from dry to somewhat moist. Develops yellow fall leaf color.
Cladrastis kentukea	Yellowwood	Late spring to early summer	White	Native on limestone cliffs and ridges. Flowers are fragrant and may be heavy one year and light the next. Tolerates high pH soils as well as acid soils. Prune only in summer, as the tree bleeds profusely if pruned in winter or spring. A pale pink flowering form, 'Rosea', is available.
Cornus florida	Flowering Dogwood	Spring	White, pink, or red	Native. One of the most popular small trees for the eastern United States. Can be planted as an understory tree or in full sun. Blooms in early spring before leafing out. True flowers are greenish yellow and nondescript. Many cultivars are available with flower bracts of white, pink or red. A couple of white double forms are in the trade. Early red fall leaf color. See "Growing and Maintaining Healthy Dogwoods", USDA Forestry Report R8-FR14.
Cornus kousa	Kousa Dogwood	Spring	White	Flowers about two to three weeks after the native dogwood with pointed rather than rounded bracts and after leaves have unfurled in spring. Attractive exfoliating bark. Large raspberry-like red fruit is very showy in late summer. Good red fall leaf color.
Cornus kousa x florida hybrids	Stellar Dogwoods	Spring	White or pink	A group of hybrids that offer an array of canopy forms and flowering characteristics. Named cultivars include 'Aurora', 'Constellation', 'Celestial', 'Ruth Ellen' and 'Stellar Pink'.
Cornus mas	Cornelian Cherry	Late winter-Early spring	Yellow	An excellent small dogwood with exfoliating bark. It lacks the showy bracts of *Cornus florida* or *C. kousa*, but is covered with a flurry of small blossoms before foliage comes out. Bright red, berry-like fruit develops in late summer, is palatable and often used in pies and fruit tarts, if gathered before the birds devour. Has few insect or disease problems. 'Spring Glow' is a selection for southern landscapes.
Cotinus coggygria	Smoke Tree	Summer	Light yellow (not significant)	Large shrub or small multi-trunk tree. Blooms in June-July with hair on portions of the inflorescence causing smoke-like appearance in August-September. 'Royal Purple' and 'Velvet Cloak' are two outstanding purple-leaved selections.
Cotinus obovatus	American Smoke Tree	Summer	White	Native. A handsome native tree, some difficulty in transplanting, but tolerant of drought and limestone soils. Summer flower not as showy as *C. coggygria*, but the seed cluster looks like a puff of smoke.

A Sampler of Small Flowering Trees

Botanical Name	Common Name	Season of Flower	Flower Color	Comments
Franklinia altahama	Franklin Tree	Summer	White	Native. An excellent tree grown in deep, moist, slightly acid soil. Needs full sun and irrigation. Can be difficult to transplant due to its fibrous root system. No serious pests reported, but has many other cultural needs. Historical significance makes these efforts seem worthwhile for the avid gardener. Good red fall leaf color.
Halesia carolina or *H. monticola*	Carolina Silverbell or Mountain Silverbell	Spring	White	Native. Leaf color is greenish-yellow in summer, and turns yellow in early fall. White bell-shaped flowers are abundant on young trees. Interesting two-winged fruit often hold until flowering the next year. Best grown in filtered sunlight. May grow large enough to serve as a shade tree.
Hamamelis x intermedia	Witchhazel	Late winter-Early spring	Yellow	Hybrids of *H. japonica* and *H. mollis*. Form is rather loose and upright. Great addition for winter color in the landscape. Good cultivars include 'Arnold's Promise', 'Jelena' and 'Pallida'. Fall color can be spectacular as yellow, orange or red.
Heptacodium miconiodes	Seven-son Flower	Summer	White	A recent introduction to the US via the Arnold and National Arboretea. Flowering is followed by attractive fruit and reddish purple bracts which remain showy until frost. Can be a large shrub or pruned to a multi-trunk tree. Attractive in winter with peeling, papery bark.
Koelreuteria bipinnata	Chinese Flame Tree	Late spring-Early summer	Yellow	One of the few yellow flowering trees. Very tolerant of urban conditions. When seed capsules mature they turn a light rosy pink. Much more attractive than the brown seed capsules of *K. paniculata*.
Koelreuteria paniculata	Golden Raintree	Late spring-Early summer	Yellow	One of the few yellow flowering trees. Very tolerant of urban conditions. The brown seed capsules are considered unattractive in late summer and fall. Prune during winter.
Lagerstroemia indica	Crapemyrtle	Summer	White, pink, lavender, or red	Grown as a single trunk or more commonly a multi-trunk tree. Flower panicles provide a lot of color during summer. Bark exfoliates to leave a smooth tan or gray mottled surface. Can be susceptible to winter injury.
Lagerstroemia fauriei	Fauriei Crapemyrtle	Summer	White	Flowers in summer with large white panicles. Bark exfoliates to leave a smooth cinnamon- colored bark which is extremely showy all year. The cultivar 'Fantasy' is one of the largest growing selections. Many hybrid cultivars of *L. indica x L. fauriei* are available, with an array of flower colors.
Magnolia grandiflora	Southern Magnolia	Summer	White	Native. An evergreen plant that can withstand urban conditions of extreme heat and drought. Several cultivars that are considered cold-hardy and flower at a young age are 'Brackens Brown Beauty', 'Little Gem' and 'Edith Bogue'.
Magnolia stellata	Star Magnolia	Early spring	White, pink-ish in bud	One of the earliest flowering plants in spring. A new selection, 'Rubra', offers pink flowering.
Magnolia virginiana	Sweet Bay Magnolia	Summer	White	Native. Single or multi-trunk trees that are semi-evergreen. Can adapt in wet, poorly drained areas, but prefers acid soils. One variety, *Magnolia virginiana var. australis,* is considered evergreen.
Magnolia x 'Galaxy'	Galaxy Magnolia	Spring	Pink	An introduction from the National Arboretum. Grows fast with a straight trunk and a formal symmetrical canopy. In most cases, blooms late enough to escape damage by late frosts. It is particularly effective when used in restricted areas such as courtyards.
Magnolia x soulangiana	Saucer Deciduous Magnolia	Early spring	White, pink, lavender	Many seedling selections bloom early. Often flowers and buds are killed by a frost. The Gresham hybrids, the Little Girl hybrids and the Lily Magnolia selections avoid frost damage by blooming one to four weeks after the saucer magnolia.

Small flowering trees can be planted as individual specimens in small or large landscape areas, or used as accent plants in screens or hedges. A tree that serves as a specimen must be outstanding. Consider the design qualities of canopy form, the abundance and color of flowers and the tree's size in relation to the rest of the landscape. In large areas, grouping trees of the same kind can present a dramatic effect, especially during flowering. Plant in center-stage locations so they can be clearly seen from indoors, the street or the entrance.

Most small trees are selected for their flowering characteristics. Flower color, the season of bloom and the duration of the bloom period are the main criteria. Since the bloom period may only last a couple of weeks, do not base your selection exclusively on the tree's flowers. Many small trees also offer uniquely colored foliage, colorful fruit, attractive bark and spectacular fall color.

Consider fruit characteristics when selecting the tree and its location in the landscape. Many small trees produce fruits that often persist for longer periods than the flowers. Fruits can enhance the landscape with bright colors, and attract birds and other wildlife. However, often the fruits are messy and create litter problems on sidewalks, patios and driveways or create a nuisance with unwanted birds.

Another selection criterion is the tree's growth habit. The mature size, form and overall appearance of the tree should complement the landscape. The most common tree forms are columnar, oval, spreading, weeping or pyramidal. Planting location can alter the form of the tree.

In wide-open spaces, trees may form a broad spreading canopy, while in small or tight areas canopy growth may be forced upright.

A plant may not live up to its potential if the environment lacks the proper water, light and nutrients. Most plants respond favorably in fertile soil with adequate drainage. Sandy soils or heavy clay soils can cause moisture regulation problems.

Finally, consider the cultural practices needed to grow healthy flowering trees. Many small flowering trees have an abundance of showy flowers, but high maintenance is required during the remainder of the year to protect the tree from unwanted pests and diseases. Trees that are susceptible to problems like scab, powdery mildew and fireblight should be avoided.

Why Doesn't My Tree Flower?

Sunlight. Most flowering trees need at least a half a day of sunlight for good flowering. As the amount of sunlight decreases, so will the number of flowers. Some trees will perform regardless of the amount of sunlight, but generally, insufficient light is a primary reason for poor flowering.

Fertility. High amounts of nitrogen fertilizer promote shoot and vegetative growth, and limit flower bud development. Flowering trees grown near or in lawns that are heavily fertilized may not flower as well, and may also delay winter dormancy. In this instance, growth may not have enough time to harden off and severe winter damage can occur on the stems and trunks of the trees due to busted bark.

Pruning. Pruning at the wrong time of the year and excessive pruning are both common causes of failure to bloom. Excessive pruning stimulates new vegetative growth and may limit flower bud set. A rule of thumb is to prune spring-flowering plants immediately after flowering, because new flower buds are set on the subsequent summer growth. Summer-flowering plants can be pruned immediately after flowering or during late winter or early spring. Flower buds are set on the current season's growth.

Koelreuteria paniculata, Golden Raintree, is one of the few yellow flowering trees used in landscapes.

Donna Fare

The spring flowers of *Magnolia x. soulangiana*, Saucer Magnolia, are very showy, but sometimes injured by late frosts.

A Sampler of Small Flowering Trees

Botanical Name	Common Name	Season of Flower	Flower Color	Comments
Malus species	Crabapples	Late spring	White, pink, red	A very showy small tree in flower and again in late summer when fruit ripens. Many flower, color and canopy forms available but many are also susceptible to scab, powdery mildew, rust and fire blight. Recommended varieties include Adirondack, Prairifire, Red Jewel, Sargent, Springsnow and White Cascade.
Oxydendrum arboreum	Sourwood	Mid-summer	White	Native. An excellent small tree that flowers in summer with long, drooping panicles. The flowers form on the bottom of the panicle and the white fruit capsules form on the top of the panicle. Grown as a single trunk, but more often as a multi-trunk tree. Likes acid soils with plenty of moisture. Excellent red fall leaf color.
Parrotia persica	Persian Parrotia	Spring	Yellow-orange to scarlet	Use in full-sun areas, with well-drained soil. Flowers in March, with non-descript petals, but showy red stamens. Bark exfoliates to reveal mosaic colors of green, white, brown and gray.
Prunus serrulata 'Kwanzan'	Kwanzan Cherry	Early spring	Pink	Probably one of the best known cherries. Flowers are double with about 30 petals. Best when planted in well-drained soil. Other recommended *Prunus* selections include 'Autumnalis', 'Mt. Fuji', 'Shirofugen', 'Snow Fountain' and 'Tai Haku'.
Prunus virginiana 'Canada Red'	Chokeberry	Late spring	White	A red-leaved selection that holds the dark red leaf color through the summer and into fall. Red fruit is used for making jams and jellies.
Prunus x 'Okame'	Okame Cherry	Early spring	Pink	Very early spring-flowering with pink petals. Growth habit distinctively upright.
Prunus x yeodensis	Yoshino Cherry	Mid-spring	White	Many varieties of cherries are available. They are valued for their profuse spring flowering, texture of foliage and fall color. Most cherries are moderately drought resistant but susceptible to bark injury. Other recommended *Prunus* selections include 'Autumnalis', 'Mt. Fuji', 'Shirofugen', 'Snow Fountain' and 'Tai Haku'.
Pyrus calleryana 'Aristocrat', 'Bradford', 'Capitol', 'Chanticleer', 'Cleveland Select', 'Redspire', and others	Aristocrat, Bradford, Capitol, Chanticleer, Cleveland Select, Redspire and others	Spring	White	All selections are profuse bloomers in spring and have great red-orange fall color. 'Capitol' is an introduction from the National Arboretum with a very columnar canopy form that can be used in small areas with all the aesthetics of a Bradford Pear. Some selections are susceptible to fire blight.
Rhus chinensis	Chinese sumac	Late summer	Yellow-white	Loose-growing, flat-topped tree flowering white in August-September. Fall color is orange-red, with orange-red fruit in October. 'September Beauty' is a superior selection.
Stewartia ovata	Mountain Stewartia	Summer	White	Native. Can be bushy in appearance. Mottled, exfoliating bark very showy in winter. Plant in moist, acid, high organic soils in full sun to partial shade. Should have protection during hot, dry weather.
Stewartia pseudocamellia	Japanese Stewartia	Summer	White	A magnificent tree with attractive, multi-colored, exfoliating bark. Dark green leaves turn yellow to deep red in fall. Best grown in an area that provides shade on hot summer afternoons. Supplemental irrigation is necessary during dry periods.
Styrax americanus	American Snowbell	Spring	White	Native. Moist, acid, sandy soils. Requires adequate moisture in dry weather. Full sun to light shade. Dark, handsome bark.
Styrax japonicus	Japanese Snowbell	Late spring	White	Flowers are bell-shaped, faintly fragrant and hang in clusters on the lower side of the branches. Snowbell has no serious insect or disease problems. 'Emerald Pagoda' is a superior form with dark green foliage and large fragrant flowers.

Donna Fare

Cercis canadensis 'Forest Pansy', a purple-leaved redbud.

Donna Fare

Fall color on *Pyrus calleryana* 'Cleveland Select'. Spring flowering is similar to Bradford pear.

If major corrective pruning is needed to shape the canopy or to remove large branches, then late winter or early spring is the optimal time. Pruning in March-April will promote rapid wound closure. You may forgo the flower display for that season, but you will promote vegetative growth for the desired canopy form.

Winter Injury. Flower buds are the part of the plant least tolerant to freezing. Selecting flowering trees that are cold-hardy and less susceptible to freeze injury is the best means for controlling winter damage. Frequently in Tennessee, a spring freeze will kill the majority of flower buds and eliminate the showy display. Saucer magnolia is a prime example of a tree that is notorious for freeze injury of flower buds. However, it continues to be a popular flowering tree selection because the abundance of flowers produced in years without freeze injury is well worth the years when the blooms were killed.

Inherent characteristics. Some flowering trees will bloom profusely one year and have a heavy fruit set. The following season, the plants may not be as showy. This phenomenon is called alternate flowering and is caused by the lack of food reserves to support simultaneous heavy fruiting and flower bud formation. Some flowering crabapples exhibit this tendency. Select trees that do not produce a heavy fruit set or thin the fruit (manually or chemically).

References:

McAuliffe, Terri. 1996. Where have all my tree flowers gone? Albany Gro News. May 1996.

Dirr, Michael A. 1990. Manual of Woody Landscape Plants: Their identification, ornamental characteristics, culture, propagation and uses. 4th ed. Stipes Publishing Company, Champaign, Ill.

Appreciation is expressed to Robin Young for design of this publication.

SP 513-15M-7/98

R12-496-11-001-99

A State Partner in the Cooperative Extension System. The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, age, national origin, sex or disability and is an Equal Opportunity Employer. COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture, and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service, Billy G. Hicks, Dean

Printing for this publication was funded by the USDA Forest Service through a grant with the Tennessee Department of Agriculture, Division of Forestry. The *Trees for Tennessee Landscapes* series is sponsored by the Tennessee Urban Forestry Council.